



PTO/SB/08A (08-00)

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INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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Complete if Known

Application Number	10/017,223
Filing Date	December 14, 2001
First Named Inventor	Emanuele, et al.
Group Art Unit	
Examiner Name	
Attorney Docket Number	19720-0229 (42896-263913)

Sheet 1 of 8

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
H	1	3,590,125		Hymes	6/29/71	
	2	3,641,240		Hymes, et al.	2/8/72	
	3	2,674,619		Lundsted	4/6/54	
	4	3,740,421		Schmolka	6/19/73	
	5	4,073,886		Kehm	2/14/78	
	6	3,450,502		Hymes	6/17/60	
	7	3,577,522		Hymes	5/4/71	
	8	4,609,546		Hiratani	9/2/86	
	9	3,140,232		Noseworthy	7/764	
	10	4,100,271		Krezanoksi	7/11/78	
	11	3,867,521		Miskel et al.	2/18/75	
	12	3,956,259		Garcia et al.	5/11/76	
	13	4,186,253		Yokoyama et al.	1/29/80	
	14	4,179,337		Davis et al.	12/18/79	
	15	4,305,922		Rhodes	12/15/81	
	16	4,600,652		Solomon et al.	7/15/86	
	17	3,089,818		Stone	5/14/63	
	18	4,395,393		Schmolka	7/26/83	
	19	4,407,790		Oakes et al.	10/04/83	
	20	3,980,772		Ginger et al.	9/14/76	
	21	2,854,378		Buckwalter et al.	9/30/58	
	22	4,897,263		Hunter	1/30/90	
	23	4,937,070		Hunter	06/26/90	
	24	4,837,014		Hunter, et al.	06/06/89	
	25	4,873,083		Hunter, et al.	10/10/89	
	26	5,028,599		Hunter	07/02/91	
	27	5,030,448		Hunter	07/09/91	
	28	4,997,644		Hunter	03/05/91	
	29	5,039,520		Hunter	08/13/91	
	30	5,032,394		Hunter	07/16/91	
	31	5,078,995		Hunter, et al.	01/07/92	
	32	5,071,649		Hunter	12/10/91	
	33	5,064,643		Hunter, et al.	11/12/91	
	34	5,047,236		Hunter, et al.	09/10/91	
	35	5,089,260		Hunter, et al.	02/18/92	
	36	5,017,370		Hunter, et al.	05/21/91	
	37	4,879,109		Hunter	11/07/89	
	38	5,041,288		Hunter	08/20/91	
Examiner Signature					Date Considered	08/24/02

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H	39	5,080,894		Hunter, et al	01/14/92		
	40	4,801,452		Hunter, et al	05/07/87		
	41	2,854,378		Buckwalter, et al	09/30/58		
	42	Re. 29,909		Kurtz	02/13/79		
	43	5,250,294		Hunter, et al	10/05/93		
	44	4,806,352		Cantrell	03/21/89		
	45	4,803,070		Cantrell, et al	02/07/89		
	46	2,979,528		Lundsted	04/11/61		
	47	3,022,335		Lundsted	02/20/62		
	48	3,036,118		Jackson et al	05/22/62		
	49	3,228,834		Gans et al	01/11/66		
	50	3,391,196		Earing et al	07/02/68		
	51	3,867,533		Schmolka	02/18/75		
	52	4,104,455		Nagasawa et al.	08/01/78		
	53	4,323,560		Baschang et al	04/06/82		
	54	4,409,209		Baschang et al	10/11/83		
	55	4,410,660		Straus	10/18/83		
	56	4,423,038		Baschang et al	12/27/83		
	57	4,489,158		Straus	12/18/84		
	58	4,575,484		Straus	03/11/86		
	59	4,606,918		Allison et al	08/19/86		
	60	4,764,567		Ott	08/16/88		
	61	5,198,211		Hunter et al	03/30/93		
	62	5,057,540		Kensil et al	10/15/91		
	63	5,340,916		Henn et al	08/23/94		
	64	4,378,347		Franco	03/29/83		
	65	5,294,365		Welch et al	03/15/9		
	66	5,371,253		Cooper	12/06/94		
	H	67	5,523,492 (Re 36,665)		Ermaunuele et al	06/04/96	
		68	4,275,244		Helfert et al	06/23/81	
		69	4,195,167		Knopf et al	03/25/80	
		70	5,114,708	A	Hunter et al.	5/19/92	
		71	5,811,088	A	Hunter et al.	9/22/98	
72		5,554,372	A	Hunter	9/10/96		

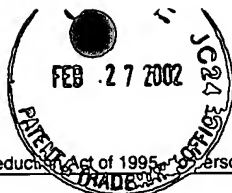
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		<b>First Named Inventor</b>	<b>Emanuele, et al.</b>
		<b>Group Art Unit</b>	
		<b>Examiner Name</b>	
<b>Sheet</b> 4 <b>of</b> 8	<b>Attorney Docket Number</b>	<b>19720-0229 (42896-263913)</b>	

<b>OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS</b>			
<b>Examiner Initials</b>	<b>Cite No.<sup>1</sup></b>	<b>Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published</b>	<b>T<sup>2</sup></b>
B	87	Schmolka, I., "A Review of Block Polymer Surfactants", <i>Journal of the American Oil Chemists Society</i> , 54, No. 3, pp. 110-116 (1977).	
	88	Block and Graft Copolymerization, Volume 2, (ed. By R.J. Ceresa, John Wiley & Sons, 1976) "The Applications of Block Copolymer Polyol Surfactants," L.G. Lundsted and L.R. Schmolka; pp. 174-295 and pp. 255-272 (references).	
	89	Reindorf, C.A., et al., "Perfluorocarbon Compounds: Effects on the Rheological Properties of Sick Erythrocytes in vitro," <i>American Journal of Hematology</i> , Vol. 19, pp. 229-236 (1985).	
	90	Padilla, F., et al., "Effect of Fluorocarbon Emulsions on the Mechanical Fragility of Normal and Sick Cells: In Vitro Studies," <i>Federation Proceedings</i> , Vol. 34, pp. 1510-1512 (1975).	
	91	Vercellotti, G.M., et al., "Activation of Plasma Complement by Perfluorocarbon Artificial Blood: Probable Mechanism of Adverse Pulmonary Reactions in Treated Patients and Rationale for Corticosteroid Prophylaxis," <i>Blood</i> , Vol. 59, pp. 1299-1304 (1982).	
	92	Rodeheaver, G.T., "Pluronic® F-68: A Promising New Skin Wound Cleanser," <i>Ann Emerg Med</i> , 9:11, pp. 572-576 (1980).	
	93	Janoff, A.S., et al., "The Modification of Human Erythrocyte Membrane Structure by Membrane Stabilizers: An Electron Spin Resonance Study," <i>American Journal of Hematology</i> , Vol. 10, pp. 171-179 (1981).	
	94	Moore, A.R., et al., "Reduction of Splenic Vascular Resistance During Profusion by Pluronic® F-68," <i>Journal of Surgical Research</i> , Vol. 8, pp. 563-566 (1968).	
	95	Benner, K.U., et al., "Cold-Induced Platelet Aggregation In Vivo And Its Inhibition By A Nonionic Surface Active Substance," <i>Thrombosis Research</i> , Vol. 2, pp. 331-342 (1973).	
	96	Hymes, A.C. et al., "The Influence Of An Industrial Surfactant Pluronic® F-68, In The Treatment of hemorrhagic Shock," <i>Journal of Surgical Research</i> , Vol. 11, pp. 191-197 (1971).	
	97	Hoie, J., et al., "Effects of Pluronic® F68, Poloralkol, On Vascular Resistance In Vivo," <i>Journal of Surgical Research</i> , Vol. 11, pp. 515-517 (1971).	
	98	Grover, F.L., et al., "A Nonionic Surfactant and Blood Viscosity," <i>Arch Surg.</i> , Vol. 106 pp. 307-310 (1973).	
	99	Grover, F.L. et al., "The Effect of Pluronic® F-68 On Circulatory Dynamics and Renal and Carotid Artery Flow During Hemorrhagic Shock," <i>Journal of Surgical Research</i> , Vol. 17, pp. 30-35 (1974).	
	100	Ketchum, L.D., et al., "Experimental Use of Pluronic® F-68 In Microvascular Surgery," <i>Plastic and Reconstructive Surgery</i> , Vol. 53, pp. 288-292 (1974).	
B	101	Ketchum, L.D., et al., "Pharmacological alterations in the clotting mechanism: Use in microvascular surgery, <i>Journal of Hand Surgery</i> , Vol. 3, pp. 407-415 (1978).	
<b>Examiner Signature</b>			<b>Date</b> <b>Considered</b>

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## OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS

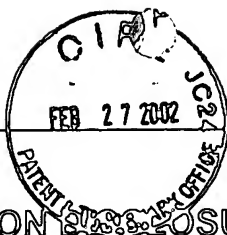
102	Vasko, K.A., et al., "Poloxalkol® (Pluronic F-68): A printing solution for cardiopulmonary bypass," <i>Trans. A. Soc. Artif. Int. Organs</i> , 18 pp. 526-531 (1972).
103	Block, N.L., et al., "Acutely Traumatized Canine Ureter, Effects of Low Molecular Weight Dextran and Surfactant Pluronic F-68," <i>Urology</i> , Vol. III, pp. 190-194 (1974).
104	Knize, D.M., et al., "Use of antisludging agents in experimental cold injuries," <i>Surgery, gynecology &amp; Obstetrics</i> , Vol. 129, pp. 1019-1026 (1969).
105	Organ Perfusion and Preservation, (ed. By Norman, J.C., Appleton-Century-Crofts, (1968)), Paton B.C., et al., "The use of a nonionic detergent added to organ perfusates," pp. 105-120.
106	Smillie, J.A., et al., "Cytopreservation of Human Platelets with Polyvinylpyrrolidone," <i>Transfusion</i> , Volume 21, pp. 552-556 (1981).
107	Gaehdgens, P., et al., "Desaggregation of Human Red Blood Cells by Various surface-Active Agents as Related to Changes of Cell Shape and Hemolysis," <i>Acta Haemat.</i> , Vol. 33, pp. 82-89 (1975).
108	Advances in Blood Substitute Research (ed. By Bolin, et al., Alan R. Liss, Inc. New York (1983)) Sugi, et al., "The Use of Fluosol-DA (FDA) in Emergency Situations: A Report of 67 Clinical Cases, Abstract/451.
109	Lane, T.A., et al., "Reduction in Toxicity of a Component of an Artificial Blood Substitute by supercritical fluid fractionation," <i>Transfusion</i> , Vol. 28, pp.375-378 (1987).
110	Lane, T.A., et al., "Paralysis of Phagocyte Migration Due to an Artificial Blood Substitute" <i>Blood</i> , Vol 64, pp. 400-406 (1984).
111	Spiess, B.D., et al., "Protection from Cerebral Air Emboli with Perfluorocarbons in Rabbits," <i>Stroke</i> , Vol. 17, pp. 1146-1149 (1986).
112	Kanter, K. R., et al., "Superiority of Perfluorocarbon Cardioplegia over Blood or Crystalloid Cardioplegia," <i>Circulation</i> , Vol. 64, pp. II-75-II-80 (1981).
113	Harjula, A., et al., "Perfluorocarbon solution as a myocardial preservation," <i>J. Applied Cardiology</i> , Vol. 2, pp. 121-136 (1987).
114	Tokioka, M.D., et al., "Effects of intracoronary infusion of arterial blood or Fluosol-DA 20% on regional myocardial metabolism and function during brief coronary artery occlusions," <i>Laboratory Investigation</i> , Vol. 75, pp. 473-481 (1987).
115	Benner, K.U., et al., "Über die Wirkung von Pluronic® F68, einem polyoxypropylen-Polyoxyäthylen-Kondensat, auf die ADP-induzierte Thrombocytenaggregation in vitro" <i>Pfugers Arch.</i> , Vol. 315, pp.45-52 (1970).
116	Forman, M.B., et al., "Reduction of Infarct Size with Intracoronary Perfluorochemical in a Canine Preparation of Reperfusion," <i>Circulation</i> , Vol. 71, pp. 1060-1068 (1985).
117	Forman, M.B., et al., "Beneficial Long-Term Effect of Intracoronary Perfluorochemical on Infarct Size and Ventricular Function in a Canine Reperfusion Model," <i>J. Am. Col. Of Cardiol.</i> , pp. 1082-1090 (May 1984).
118	Goodman, R.L., et al., "Perfluorocarbon Emulsions in Cancer Therapy: Preliminary Observations on Presently Available Formulations," <i>Int. J. Radiation Oncology Biol. Phys.</i> , Vol. 10, pp. 1421-1424 (1984).
119	Grover, et al., "A Nonionic Surfactant and Blood Viscosity - Experimental Observations," <i>Arch. Surg.</i> Vol. 106, pp. 307-310 (March 1973).
120	Connaghan et al., "Specific Identification of Fibrin Polymers, Fibrinogen Degradation Products, and Crosslinked Fibrin Degradation Products in Plasma and Serum With a New Sensitive Technique," <i>Blood</i> , Vol. 65, No. 3, pp. 589-597 (March 1985).

Examiner  
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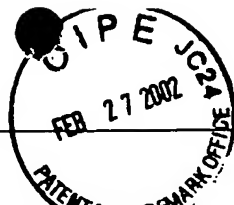
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## OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS

✓	121	Atkinson, T.P., et al., "Ion transport mediated by copolymers composed of polyoxyethylene and polyoxypropylene," <i>The American Physiological Society</i> , 0363-6143/88, pp. C20-C26 (1988).	
	122	Brooks et al., "Rheology of blood cells," Departments of Pathology and Chemistry, University of British Columbia, Vancouver, BC, Canada, pp. 73-96.	
	123	Wiman et al., "Determination of Soluble Fibrin in Plasma by a Rapid and Quantitative Spectrophotometric Assay," <i>Thrombosis and Haemostasos</i> , F.K. Schattauer Verlag GmbH (Stuttgart) 55 (2), pp. 18-193 (1986).	
	124	Hunter, R.I., et al., "The Adjuvant Activity of Nonionic Block Polymer Surfactants. III. Characterization of Selected Biologically Active Surfaces," <i>Scand. J. Immunol.</i> , Vol. 23, pp. 287-300 (1986).	
	125	Technical bulletin entitled "Performance Chemicals"	
	126	Technical bulletin entitled "Pluronic® Block copolymer surfactants"	
	127	Perfluorochemical Blood Substitutes, Technical Information Ser. No. 5, June 30, 1978, Revised, July 1, 1981, Manufacturer: the Green Cross Corporation.	
	128	The Patent Cooperation Treaty International Search Report for PCT Patent Application No. PCT/US87/01067.	
	129	Patent Cooperation Treaty International Search Report for PCT Patent Application No. PCT/US86/01747.	
	130	Heron, M.W., et al., "A Method for Measuring a Nonionic Surface-Active Agent (Pluronic F-68) in Biological Fluids," <i>Analytical Biochemistry</i> , Vol. 24, pp. 491-495 (1968).	
	131	Uno, T., et al., "Determination of Surface-Active Agents. VIII. Infrared Determination of the Proportion of Ethylene Oxide and Propylene Oxide in Pluronic," <i>Chem. Pharm. Bull.</i> , Vol. 15(1), pp. 77-82 (1967).	
	132	Hymes, A.C., et al., "Influence of an Industrial Surfactant (Pluronic F-68) on Human Amniotic Fluid Embolism," <i>American Journal Obstetrics and Gynecology</i> , Vol. 107(8), pp. 1217-1222 (Aug. 15, 1970).	
	133	Grover, F.L., et al., "Beneficial Effect of Pluronic F-68 on the Microcirculation in Experimental Hemorrhagic Shock," <i>Surgical Forum</i> , Vol. 21, pp. 30-32 (1970).	
	134	Maugh, T.H., "Perfluorochemical Emulsions: Promising Blood Substitutes," <i>Science</i> , Vol. 179, pp. 669-672 (1973).	
	135	Justice, C. et al. "Prevention of Thrombosis with Agents which Reduce Platelet Adhesiveness," <i>The American Surgeon</i> , Vol. 40, pp. 186-189 (1974).	
	136	Danielson, G., et al., "Use of Pluronic F-68 to Diminish Fat Emboli and Hemolysis During Cardiopulmonary Bypass," <i>The Journal of Thoracic and Cardiovascular Surgery</i> , Vol. 59(2), pp. 178-184 (1970).	
	137	Ketchum, L.D., "Experimental Use of Pluronic F68 in Microvascular Surgery," <i>Plastic Reconstructive Surgery</i> , Vol. 54, p. 478 (1974).	
✓	138	Hunter, R., "Adjuvant Activity of Non-ionic Block Copolymers. IV. Effect of Molecular Weight and Formulation on Titre and Isotype of Antibody," <i>Vaccine</i> , Vol. 9, pp. 2500256 (April 1991).	
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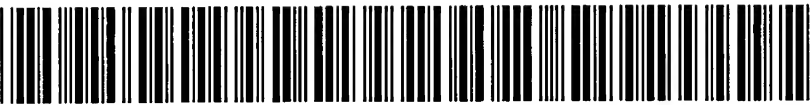
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168	Richard, M.N., et al., "Effect of Lysine and Wettig Agents on Activated Plasminogen Solutions," <i>Canadian Journal of Biochemistry &amp; Physiology</i> , Vol. 41, pp. 211-217 (1963).
169	Sakauchi, "Prevention of Excess Hemolysis During Cardiopulmonary Bypass by the Use of Pluronic F-68," <i>Kitakanto Med. J.</i> , Vol. 23, No. 3, pp. 231-238 (1973).
170	Opposition Brief filed by Asahi Glass Co., filed Feb. 27, 1998 with the Japanese Patent Office.
171	"Nissan Plonon Tokushu Kobunshi Kaimen Kassei Zai (phonetically)", Nippon Oil & Fats Co.'s Catalog, April, 1980 (translation provided).
172	Opposition Brief filed by Nippon Oil & Fats Co., filed February 19, 1998 with the Japanese patent Office.
173	Experimental Results I (Evidence A-3 submitted by Opposer Asahi) February 27, 1998.
174	Experimental Results II (Evidence A-4 submitted by Opposer Asahi) February 27, 1998.
175	Experimental Report (Evidence A-3 submitted by Opposer Nippon) February 12, 1998.
176	Memorandum: Analysis of Copolymer samples from Nippon Oil & Fats, Co. - for Japanese patent Application No. 509970/92.
177	Henry, R. L., et al., "Burn Wound Coverings and the Use of Poloxamer Preparations", <i>Critical Reviews in Biocompatibility</i> , Vol. 5, No. 3, pp. 207-220 (1989).
178	Gaylord, N. G., "Polyethers, Part i. Polyalkylene Oxides and Other Polyethers", <i>High Polymers</i> , Part I, Sec. V(B), pgs. 233-237, 1963.
179	Paton, B.C. et al., "The Use of a Nonionic Detergent added to Organ Perfusates", <i>Organ Perfusion and Preservation</i> , (ed. by Norman, J.C., Appleton-Century-Crofts, (1968)), pgs. 105-120.
180	Sugi, et al., "The Use of Fluosol-DA (FDA) in emergency situations: a report of 67 clinical cases", Abstract/451, <i>Advances in Blood Substitute Research</i> (ed. by Bolin, et al.) 1983.
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